Possible SAB Issues for Calendar Year 2004

Pete Kmet January 12, 2004

Human Health Risk Assessment Issues

Soil Direct Contact Pathway

- Define "significance" for determining when the dermal exposure pathway must be evaluated
- IEUBK soil lead model

Ground Water Cleanup Levels

Exposure scenarios for non-potable ground water

Surface Water Cleanup Levels

- TPH surface water cleanup levels
 - Bioconcentration/bioaccumulation factors for TPH EC fractions (also eco issue)
 - WET testing—protocols and data interpretation

Remedy Selection

- Exposure scenarios for evaluating the protectiveness of soil remediation levels, including alternative land uses and soil covers
- Exposure scenarios for evaluating the protectiveness ground water remediation levels, including the effectiveness of institutional controls restricting ground water use

Other Human Health

 Additive risk considerations for mixtures of TPH and other contaminants (for 4-phase model as well as other risk calculations)

Ecological Issues

- Soil bioassay work TPH contaminated soil—review of experimental design, consultation on interpretation of resulting data
- WET testing—protocols and data interpretation
- Bioconcentration/bioaccumulation factors for TPH EC fractions

Fate and Transport Issues

- Guidance for how to assign chemical parameters when there is variability in the literature (Henry's Constant, solubility, Koc)
- Guidance for how to factor in site variability for FOC
- Guidance for use of leaching tests

Empirical Methods

 Empirical demonstrations—how do you make this demonstration (required testing, data interpretation); what's required to determine a steady state condition exists

Natural Attenuation

 Natural attenuation guidance, including protocol for determining an appropriate biodegradation rate to use at a site

Fate and Transport—TPH Specific Issues

- TPH guidance-overall review
 - Methods for evaluating site-specific variability in TPH fraction data
 - Methanol preservation of samples
 - Alcohol fuel issues—how to consider when establishing cleanup levels
 - Laboratory method for establishing a site-specific residual saturation value
 - Use of the soil attenuation model to account for biological degradation in the vadose zone

Vapor Pathway

- Define scientifically defensible model
- Define scientifically defensible assumptions (defaults for input parameters)
- Define protocols for vapor sampling (where and how it should be done, method for determining TPH EC fractions)
- Define "significance" for determining when the vapor pathway must be evaluated

Area-wide Lead and Arsenic Soil Contamination

- Defining moderate levels of lead and arsenic contamination
- Ecological Risks

Freshwater Sediments Approach